Monetary policy in a sustainable union

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Monetary/Fiscal interactions in the Eurozone

- Common monetary/(Mostly) independent fiscal policies
- Subset of countries with high debt-to-output ratios
- Since 2010, exposure to default risk for high debt countries

A crude way of thinking about monetary policy in this context:

$$\min_i \mathbb{E} \left[ (\pi(i) - \bar{\pi})^2 \right]$$

Subject to

Sustainability constraints

- Avoid financial meltdowns/exits from Eurozone
- Avoid political interference with mandate
- ...
Sustainability constraints and monetary policy

How do sustainability constraints interact with the price-stability mandate?

- **Direct shocks** to these constraints have spurred ECB interventions
  - E.g. Various interventions in bond markets to “preserve the euro”

- Constraints can affect the conduct of monetary policy in response to **traditional shocks**
  - E.g. ECB less inclined to raise rates if that tightens sustainability constraints

Roadmap:

1. A direct “idiosyncratic” shock: the formation of the Italian government in 2018
2. A traditional supply shock and the lift-off event of 2022
3. Concluding remarks

Before then: a brief detour on the data I will use
Bond markets and expectations

- **Expectations** of future inflation and nominal interest rates implied by nominal and inflation-protected bonds

- In Bocola, Dovis, Jorgensen and Kirpalani (2024) we use this data to test for the stability of the US monetary reaction function post 2020

\[
i_t = \rho i_{t-1} + (1 - \rho) \left[ i_t^* + \psi_{\pi} (\pi_t - \bar{\pi}) \right] + \varepsilon_t
\]

\[
\mathbb{E}_t [i_k - \rho i_{k-1}] = c_t + \psi_{\pi} \mathbb{E}_t [(1 - \rho) \pi_k]
\]
Bond markets and expectations

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<table>
<thead>
<tr>
<th>Pros</th>
<th>Cons</th>
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<tbody>
<tr>
<td>Endogeneity of monetary shocks</td>
<td>Risk and liquidity premia</td>
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<tr>
<td>Zero lower bound</td>
<td>No measure of output gap</td>
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<td><strong>High frequency</strong></td>
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Bond market views of the FED

A more Dovish Fed in 2020-2022, consistent with average inflation targeting
Bond market views of the ECB

A more Dovish ECB in 2020-2022...role of sustainability constraints?
The anatomy of a direct idiosyncratic shock

- Formation of the Italian government in 2018
  - Three main coalitions, none had enough votes to govern after the election
  - “5 star movement” and “Lega” surprisingly came into an agreement to form a government, mostly based on common anti-EU/anti-austerity views
  - Between May and June, sharp volatility in the ITA-GER spread

**Impact on expected inflation and nominal rates?**
Direct shocks act as "demand" shocks in the Eurozone

- **Inflation** and **nominal rates** expectations fell in response to increase in the likelihood of an Italian default

- Implied $\psi_\pi$ twice as large as unconditional estimate

- Similar results for other events of this type (E.g. Greek referendum)
Interpretation

- Bond markets view a debt crisis in the Eurozone as deflationary for the union
  - Sharp contrast to what happens in Emerging Markets, see Arellano, Bai and Mihalache (2021)
- They also expect the ECB to accommodate these shocks aggressively
- No big change in inflation expectations (15 basis points over the Italian episode)

**Bottom line:** Direct shocks do not appear to interfere with the price stability mandate, at least when they are idiosyncratic
A traditional shock: the lift-off event of 2022

- **Inflationary pressures** from post-pandemic recovery and energy shocks
- March-May: expectations of rates increases
- June 5: ECB decides to end net purchase under the APP and to raise interest rates
  - Sovereign spreads in peripheral countries **jump**
- June 15: Ad hoc meeting reverses part of the previous decision and institutes the TPI

Did markets reassess their views on the ECB monetary stance?
Monetary stance and inflation: Eurozone vs US

- Prior to June 15: Markets expected Eurozone rates to increase relative to US
- After June 15: Reversal of expectations
- Euro area inflation followed opposite patterns: increased in relative terms
- Consistent with markets believing ECB would be more Dovish toward inflation

Case in which sustainability constraints interact with ECB mandate
Summary and further thoughts

- Aside from **price stability**, ECB wants to keep a **sustainable monetary union**
- The two objectives may at time clash, leading to a **trade-off**
- ECB has designed institutions (OMT, TPI, ecc.) to ameliorate this trade-off
  - Appear to have worked when looking at “direct” idiosyncratic shocks to sustainability
  - But these considerations still constraint the conduct of monetary policy in **tightening cycles**
- To fully solve this issue, need to focus on public debt sustainability
  - Reform of stability and growth pact
- **Challenges**
  - Public debt consolidations are becoming a mirage (debt looks like a step function)
  - Budgets are becoming more inflexible (high level of taxes, high level of tax intolerance, etc.)